

Table S1. Number of mice with each genotype in $Cv2^{+/-}$ intercrossing

	$Cv2$		
	$+/+$	$+/-$	$-/-$
E12.5	35 (24.6)	77 (54.2)	30 (21.1)
E14.5	28 (22.8)	69 (56.1)	26 (21.1)
E18.5	11 (33.3)	14 (42.4)	8 (24.2)
P0	9 (21.4)	21 (50.0)	12 (28.6)*
Adult	40 (37.0)	68 (63.0)	0 (0)

*All the neonates died soon after birth.

Percentages are given in parentheses.

Table S2. Penetrance of skeletal abnormalities in *Cv2*^{-/-} mice

	Phenotypes	<i>Cv2</i>	
		+/+ or +/- (n=15)	-/- (n=9)
Metopic suture	Normal	15	0
	Less ossified	0	9
Interparietal bone	Normal	15	0
	Small	0	9
Supraoccipital bone	Normal	15	0
	Small	0	4
	Small, not ossified	0	5
Basisphenoid	Normal	15	0
	Presence of cavity	0	9
Retrotympanic process of the squamosal bone	Normal	15	0
	Lost	0	9
Laryngeal cartilage	Normal	15	0
	Malformed*	0	9
Bronchial cartilage	Normal	15	0
	Lost	0	9
Vertebral arch	Normal	15	0
	Lost [†]	0	9
Rib	Normal	15	0
	Thinner	0	9
Rib (T13)	Normal	15	0
	No ribs attached	0	9
Scapula	Normal	15	2
	Malformed	0	7
Deltoid tuberosity	Normal	15	0
	Lost	0	9
Symphysis of the pubic bone	Normal	15	6
	Diastasis	0	3

*Laryngeal cartilage malformation: the lesser horn was almost lost, the greater horn was slightly reduced and the thyroid cartilage was hollow in 100% (nine out of nine) of the mutant.

[†]The arch of the 2nd cervical vertebra was lost in 33% (three in nine), almost lost in 22% (two in nine) and rudimental in 44% (four out of nine).